

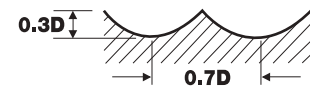
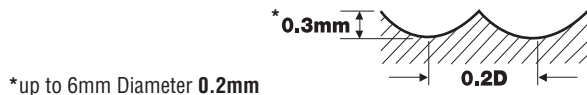
## 2 FLUTE BALL NOSE

G9438, G9624, G9455 & G9454 Series

## CUTTING DATA

Stepover Cutting

MATERIAL		CARBON STEEL, ALLOY STEEL & TOOL STEELS				CARBON STEEL, ALLOY STEEL & TOOL STEELS				HARDENED STEEL				CAST IRON				ALUMINIUM ALLOY			
Hardness		~ HRc30				HRc30 ~ HRc45				HRc45 ~ HRc50				-				-			
Strength		~ 1000N/mm <sup>2</sup>				1000 ~ 1500N/mm <sup>2</sup>				1500N/mm <sup>2</sup> ~				-				-			
Dia.	Rad.	RPM	Feed	Vc	Fz	RPM	Feed	Vc	Fz	RPM	Feed	Vc	Fz	RPM	Feed	Vc	Fz	RPM	Feed	Vc	Fz
2	1	12350	640	80	0.026	9150	415	55	0.023	4000	125	25	0.016	10500	220	65	0.010	30800	395	195	0.006
3	1.5	11400	575	105	0.025	8550	390	80	0.023	3800	125	35	0.016	7050	230	65	0.016	20500	395	195	0.010
4	2	8950	630	110	0.035	7150	450	90	0.031	3600	150	45	0.021	5150	285	65	0.028	15400	395	195	0.013
5	2.5	7800	700	125	0.045	6200	490	95	0.040	3100	150	50	0.024	4150	330	65	0.040	12100	470	190	0.019
6	3	7250	870	135	0.060	5900	705	110	0.060	2700	160	50	0.030	3400	360	65	0.053	10300	470	195	0.023
8	4	6100	1090	155	0.089	4900	785	125	0.080	2050	190	50	0.046	2500	460	65	0.092	7900	540	200	0.034
10	5	5450	1330	170	0.122	4350	870	135	0.100	1750	190	55	0.054	2050	460	65	0.112	6150	540	195	0.044
12	6	4990	1500	190	0.150	3950	950	150	0.120	1500	210	55	0.070	1750	460	65	0.131	5150	630	195	0.061
14	7	4530	1495	200	0.165	3600	925	160	0.128	1300	210	55	0.081	1400	460	60	0.164	4300	630	190	0.073
16	8	4085	1470	205	0.180	3200	905	160	0.141	1150	210	60	0.091	1300	460	65	0.177	3850	540	195	0.070
18	9	3800	1425	215	0.188	3000	890	170	0.148	1050	210	60	0.100	1100	460	60	0.209	3400	540	190	0.079
20	10	3550	1425	225	0.201	2800	885	175	0.158	950	210	60	0.111	1050	420	65	0.200	2950	540	185	0.092



NOTE: For long & extra long types the feed should be reduced by around 50%.

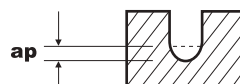
## 2 FLUTE BALL NOSE LONG NECK

G9B81 Series

## CUTTING DATA

Slotting

MATERIAL	NON-ALLOYED STEEL & ALLOY STEEL					ALLOY STEEL & HEAT RESISTANT STEEL				
Hardness	~ HRc30					HRc30 ~ HRc45				
Strength	~ 1000N/mm <sup>2</sup>					1000 ~ 1500N/mm <sup>2</sup>				
Dia.	RPM	Feed	Vc	Fz	ap	RPM	Feed	Vc	Fz	ap
0.4	26350~34000	150~415	33~43	0.003~0.006	0.018~0.036	19100~24200	75~230	24~30	0.002~0.005	0.018~0.036
0.5	26350~34000	150~415	41~53	0.003~0.006	0.023~0.045	19100~24200	75~230	30~38	0.002~0.005	0.023~0.045
0.6	26350~34000	190~535	50~64	0.004~0.008	0.027~0.054	19100~24200	95~300	36~46	0.002~0.006	0.027~0.054
0.8	26350~34000	190~535	66~85	0.004~0.008	0.036~0.072	19100~24200	95~300	48~61	0.002~0.006	0.036~0.072
1	24650~31000	210~595	77~97	0.004~0.010	0.045~0.090	17400~22100	105~330	55~69	0.003~0.007	0.045~0.090
1.2	20500~26000	210~665	77~98	0.005~0.013	0.055~0.100	14500~18300	105~330	55~69	0.004~0.009	0.055~0.100
1.4	18000~22000	210~665	79~97	0.006~0.015	0.062~0.125	12800~15300	105~330	56~67	0.004~0.011	0.062~0.125
1.5	16000~20500	210~665	75~97	0.007~0.016	0.070~0.135	11500~14900	105~330	54~70	0.005~0.011	0.070~0.135
1.6	15500~20000	210~665	78~101	0.007~0.017	0.075~0.145	11200~14000	105~330	56~70	0.005~0.012	0.075~0.145
1.8	14500~18200	210~665	82~103	0.007~0.018	0.080~0.160	10200~12800	105~330	58~72	0.005~0.013	0.080~0.160
2	13000~16000	210~665	82~101	0.008~0.021	0.090~0.180	9400~11500	105~330	59~72	0.006~0.014	0.090~0.180
3	9000~11000	210~665	85~104	0.012~0.030	0.135~0.270	6000~11500	105~330	57~108	0.009~0.014	0.135~0.270
4	7200~9350	210~665	90~117	0.015~0.036	0.180~0.360	5000~6600	105~330	63~83	0.011~0.025	0.180~0.360



NOTE: For long & extra long types the feed should be reduced by around 50%.